## Years 5–6 band Design and Technologies

Australian Curriculum Version 9.0: Achievement standard aligned to content descriptions

This resource shows alignment between aspects of the achievement standard and relevant content descriptions for Years 5–6 band. A similar resource is available for Prep/other bands.

The Australian Curriculum (AC) v9.0 code for each content description includes an element indicating the strand it is organised by, e.g. AC9TDE6 $\underline{K}$ 01 indicates Knowledge and understanding strand.

## Key to content description codes: Design and Technologies

e.g. **AC9TDE6K01** 

Australian Curriculum (**AC**) Version 9 (**9**) Technologies Learning area (**T**) Design and Technologies (**DE**) Years 5–6 band (**6**) Strand (**K**, **P**) Content description number (##) Strands: • K—Knowledge and understanding

• P — Processes and production skills

Years 5–6 Australian Curriculum: Design and Technologies achievement standard

By the end of Year 6 students explain how people design products, services and environments to meet the needs of communities, including sustainability. For each of the 3 prescribed technologies contexts they explain how the features of technologies impact on design decisions and they create designed solutions. Students select and justify design ideas and solutions against design criteria that include sustainability. They communicate design ideas to an audience using technical terms and graphical representation techniques. Students develop project plans, including production processes, and select technologies and techniques to safely produce designed solutions.

Achievement standard aspect	Relevant content description/s	AC v9.0 code
By the end of Year 6	Students learn to:	-
Students explain how people design products, services and environments to meet the needs of communities, including sustainability.	<ul> <li>explain how people in design and technologies occupations consider competing factors including sustainability in the design of products, services and environments</li> </ul>	AC9TDE6K01
For each of the 3 prescribed technologies contexts they explain how the features of technologies impact on design decisions and they create designed solutions.	<ul> <li>explain how electrical energy can be transformed into movement, sound or light in a product or system</li> </ul>	AC9TDE6K02
	<ul> <li>explain how and why food and fibre are produced in managed environments</li> </ul>	AC9TDE6K03
	• explain how the characteristics of foods influence selection and preparation for healthy eating	AC9TDE6K04
	<ul> <li>explain how characteristics and properties of materials, systems, components, tools and equipment affect their use when producing designed solutions</li> </ul>	AC9TDE6K05
	<ul> <li>investigate needs or opportunities for designing, and the materials, components, tools, equipment and processes needed to create designed solutions</li> </ul>	AC9TDE6P01
They select and justify design ideas and solutions against design criteria that include sustainability.	• negotiate design criteria including sustainability to evaluate design ideas, processes and solutions	AC9TDE6P04
They communicate design ideas to an audience using technical terms and graphical representation techniques.	<ul> <li>generate, iterate and communicate design ideas, decisions and processes using technical terms and graphical representation techniques, including using digital tools</li> </ul>	AC9TDE6P02
They develop project plans, including production processes, and select technologies and techniques to safely produce designed solutions.	<ul> <li>select and use suitable materials, components, tools, equipment and techniques to safely make designed solutions</li> </ul>	AC9TDE6P03
	<ul> <li>develop project plans that include consideration of resources to individually and collaboratively make designed solutions.</li> </ul>	AC9TDE6P05

## More information

If you would like more information, please visit the QCAA website www.qcaa.qld.edu.au. Alternatively, email the K–10 Curriculum and Assessment branch at australiancurriculum@qcaa.qld.edu.au.

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